

2010 TRAC Bridge Competition Checklist

9th and 10th Grade Suspension Bridge Competition

Please use this checklist to avoid common mistakes that lead to disqualifications. This list is not all-inclusive and is not a substitute for the official competition rules. Please refer to the official competition rules provided in your bridge kit for a complete explanation of all eligibility requirements and design specifications.

The balsa wood used to construct each floating bridge must be only *ONE LAYER* thick. At the joints, the balsa wood bridge may need to be more than one layer thick. These joints may not be any more than 1/8-inch thick. The length of the double layer at the joint may not exceed 1 inch in length.

Lamination is not permitted.

The materials provided are the **ONLY** materials to be used when building the bridges. The use of additional material is permitted for decorations or visual aids.

A car that is 2 inches wide by 1 inch tall must be able to drive across the bridge.

Bridge will be tested for strength-to-weight ratio.

Length of the bridge must be 15 inches.

The floating bridge must have guides to hold the bridge alignment **BUT** they must not interfere with the test for buoyancy.

The floatation test will be a 3 pound weight that is placed on the roadway deck.

The floating span must be a minimum of 12 inches and a maximum of 15 inches.

The floating bridge must have supports suitable for placement on Pitsco di2000. Please see picture of Pitsco tester on page 4 of the competition rules.

StructureTester (<http://catalog.pitsco.com/store/detail.aspx?ID=2557&bhcp=1>). For additional information on the tester, visit www.pitsco.com.

Vertical supports can be no higher than 12 inches (anything more than 12 inches could result in faulty testing). The vertical supports may not make contact with any part of the testing tank.